

CHAPTER 4 OF THE NOTEBOOK

1) SOLVE

$$\begin{array}{r} x + 22 = 15 \\ -22 \quad -22 \\ \hline x = -7 \end{array}$$

$x = -7$

2) SOLVE

$$\begin{array}{r} -7x = -28 \\ \hline -7 \quad -7 \end{array}$$

$x = 4$

3) SOLVE

$$\begin{array}{r} 3x + 1 = 20 \\ -1 \quad -1 \\ \hline 3x = 19 \\ \frac{3x}{3} = \frac{19}{3} \end{array}$$

$$\begin{array}{r} 6\frac{1}{3} \\ 3 \overline{) 19} \\ -18 \\ \hline 1 \end{array}$$

$x = 6\frac{1}{3}$

4) SIMPLIFY

$$\begin{array}{l} 2(x+3) - 1(x+1) \\ 2x+6 - 1x-1 \\ 1x+5 \end{array}$$

$x+5$

5) SIMPLIFY

$$\frac{-12A + 6}{-3} \Rightarrow \frac{-12A}{-3} + \frac{6}{-3}$$

$4A - 2$

6) SOLVE

$$3(2x+1) - 1 = 14$$

$$6x + 3 - 1 = 14$$

$$6x + 2 = 14$$

$$\begin{array}{r} -2 \quad -2 \\ \hline \end{array}$$

$$\frac{6x}{6} = \frac{12}{6}$$

$$x = 2$$

7) SIMPLIFY

$$5x^2 - 3x^2 - 6x^2 + 5x^2 - 18 - 4$$

$$1x^2 - 22$$

$$x^2 - 22$$

8) SOLVE

$$5(x+3) - 2(x+1) = 18$$

$$5x + 15 - 2x - 2 = 18$$

$$3x + 13 = 18$$

$$\begin{array}{r} -13 \quad -13 \\ \hline \end{array}$$

$$3x = 5$$

$$\frac{3x}{3} = \frac{5}{3}$$

$$3 \overline{) 5} \begin{array}{r} 1\frac{2}{3} \\ -3 \\ \hline 2 \end{array}$$

$$x = 1\frac{2}{3}$$

9) WHICH ONE IS SIMPLIFY?

$$-1x + 10, \quad 10 - 1x,$$

$$10 - x$$

$$10 - x$$

10) SIMPLIFY

$$10A - 11A + 4A - 3A - 1A$$

$$14A - 15A \Rightarrow -1A$$

$$-A$$

OPEN NOTEBOOK

SECTION

NAME _____

ALG I - PART 1

2007-2008

DATE _____

2nd SEMESTER TEST

PD _____

5TH CHAPTER

OF THE NOTEBOOK

1) SOLVE THIS PROPORTION FOR X

$$\frac{x}{8} = \frac{40}{16}$$

$$x = 20$$

2) WHAT IS 20% OF 150?

$$30$$

3) SIMPLIFY.

$$-2x + 5y + 3y$$

$$8y - 2x$$

4) PUT INTO RANK ORDER, STATE THE RANGE AND FIND THE MEDIAN

2, 8, 3, 1, 5, 2, 1, 9, 3

RANGE $\Rightarrow 1 \rightarrow 9$

1, 1, 2, 2, 3, 3, 5, 8, 9

MEDIAN $\Rightarrow 3$

5) FIND THE MODE AND MEAN ONLY

4, 2, 6, 6, 7, 8, 9, 10, 7, 6, 1

MODE $\Rightarrow 6$

MEAN $\Rightarrow 6$

6) SOLVE FOR X

$$\begin{array}{r} 3x + 7 = 13 \\ -7 \quad -7 \\ \hline 3x = 6 \end{array}$$

$$x = 2$$

7) SIMPLIFY:

$$\frac{4x + 8}{4}$$

$$\frac{\cancel{2x} + \cancel{4}}{x+2}$$

8) IF 4 COINS ARE FLIPPED 15 TIMES AND (HEAD, HEAD, HEAD, HEAD) CAME UP 3 TIMES -- WHAT IS THE PROBABILITY BY PERCENT THAT THIS HAPPENS?

$$3 \text{ OF } 15 \quad \frac{3}{15}$$

$$20\%$$

9) FIND. WHAT IS 35% OF 200?

$$70$$

10)

SOLVE FOR X

$$4(x - 8) = 8$$

$$4x - 32 = 8$$

$$x = 10$$

OPEN PRACTICE

NOTEBOOK SECTION
AGE I - PART C

NAME _____

DATE _____

PD _____

6th CHAPTER OF THE NOTEBOOK

- 1) GIVEN THE FOLLOWING AGES MAKE A FREQUENCY TABLE

12, 13, 16, 18, 13, 14

11, 15, 16, 17, 13, 10

12, 14, 16, 18, 14, 12

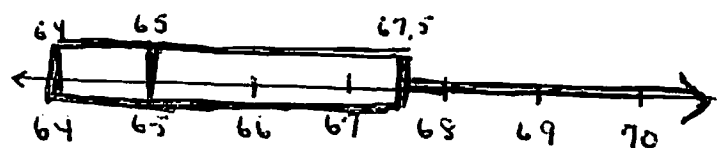
18	11
17	1
16	111
15	1
14	111
13	111
12	111
11	1
10	1

- 2) GIVEN THE FOLLOWING HEIGHTS MAKE A BOX AND WHISKER PLOT

68 64 70

64 67 65

65 66 64



64 64 64 65 65 66 67 68 70

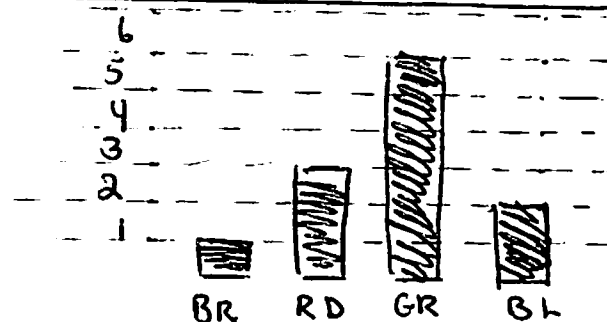
- 3) MAKE A BAR GRAPH

BROWN GETS 1 VOTES

RED GETS 3 VOTES

GREEN GETS 6 VOTES

BLUE GETS 2 VOTES



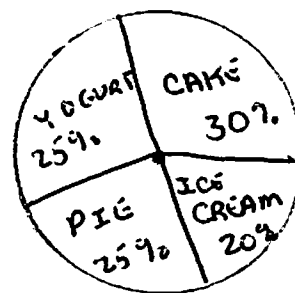
- 4) FILL IN A LABEL THIS PIE GRAPH

ICE CREAM 20%

CAKE 30%

PIE 25%

YOGURT 25%



- 5) FIND THE MEAN

3
4
1 28
6
14 20

90, 93, 94, 91, 96, 97, 97

MEAN \Rightarrow 94

6) LABEL AS
 LINEAR FUNCTION

$$2x = -8$$

CONSTANT LINEAR FUNCTION

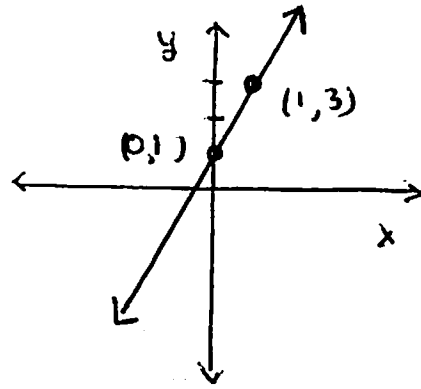
$$3x + 2y = 1$$

LINEAR RELATION

$$y = 4$$

7) GRAPH:

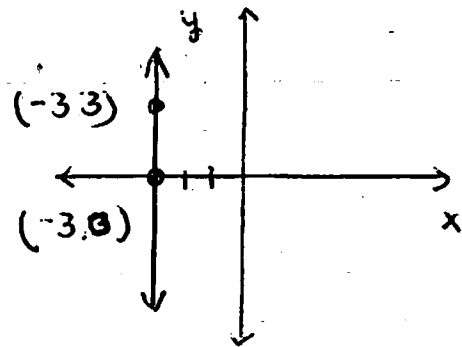
$$y = 2x + 1$$



PUT 2 POINTS ON EACH GRAPH

8) GRAPH:

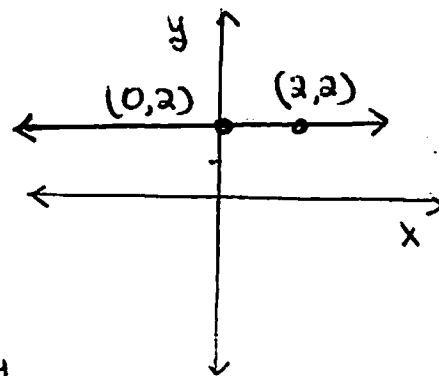
$$2x = -6$$



PUT 2 POINTS ON EACH GRAPH

9) GRAPH:

$$y = 2$$



PUT 2 POINTS ON EACH GRAPH

10) MATCH

B ↗
C ↔
A ↑


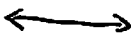


A = LINEAR RELATION

B = LINEAR FUNCTION

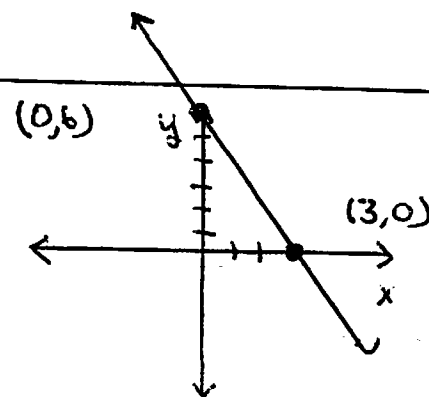
C = CONSTANT LINEAR FUNCTION

7th CHAPTER OF THE NOTEBOOK

1) FILL IN THIS CHART OF THE LINEAR FAMILY

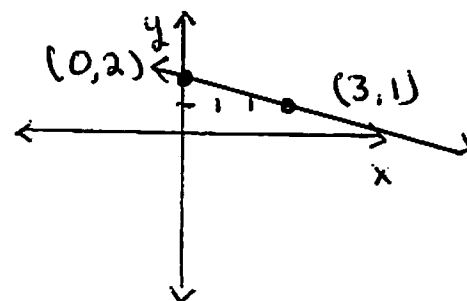
NAME	GRAPH	EQUATIONS	KEYS	
LINEAR FUNCTION		$y = mx + b$ $Ax + By = C$	x, y	$m = \text{SLOPE}$
CONSTANT LINEAR FUNCTION		$y = b$	y ONLY	$a = x\text{-INTERCEPT}$ $b = y\text{-INTERCEPT}$
LINEAR RELATION		$x = a$	x ONLY	$k = \text{CONSTANT}$
DIRECT VARIATION		$y = kx$	LF PASSING $(0,0)$	

3) GRAPH $2x + 1y = 6$



PUT 2 POINTS ON EACH GRAPH

4) GRAPH $y = -\frac{1}{3}x + 2$

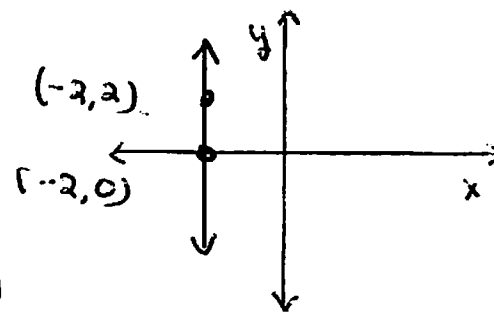


PUT 2 POINTS ON EACH GRAPH

5) GRAPH $6x - 4y = -4$

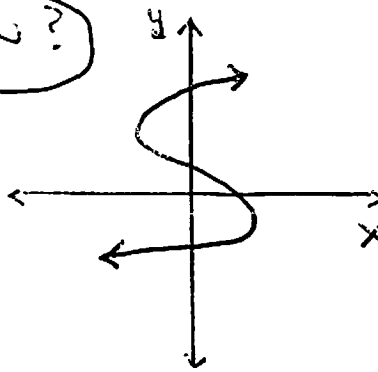
$$2x = -4$$

$$x = -2$$



PUT 2 POINTS ON EACH GRAPH

6) FUNCTION OR RELATION?



7) WRITE IN BOTH STANDARD AND SLOPE-INTERCEPT

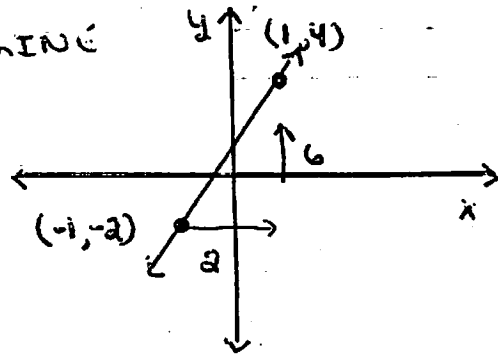
$$\frac{1}{3}x + \frac{1}{4}y = 1$$

$y = mx + b$ $Ax + By = C$

$$y = -\frac{1}{3}x + 1$$
$$1x + 3y = 3$$

8) FIND THE SLOPE OF THIS LINE

$$\frac{6}{2} \Rightarrow \textcircled{3}$$



9) WRITE THE EQUATION OF THE LINE GIVEN.

$$b = -2$$

$$m = 2$$

$$y = 2x - 2$$

10) WRITE THE EQUATION OF THE LINE IN STANDARD FORM.

GIVEN

$$A =$$

$$B =$$

$$C =$$

$$Ax + By = C$$